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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,480	08/01/2003	Sang-Hyun Doh	5000-1-359	3015

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EXAMINER

PASCAL, LESLIE C

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/632,480

Applicant(s)

DOH ET AL.

Examiner

Leslie Pascal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. Although the examiner indicated that there was allowable subject matter, the changes made to the claims have added 112 problems and reads on the art cited in this rejection. Please read the examiner's comments with regard to allowable subject matter.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 11 of claim 1, "traveling through" appears to be misdescriptive. It appears that this should say, "That have been output from the add/drop section".

In line 4 of claim 5, which says, "outputting inputted" should say, "outputting demultiplexed signals that were input".

In lines 7 and 12 of claim 5, "a channels" should be "channels".

In line 14 of claim 5, "demultiplexer" should be "multiplexer".

In line 6 of claim 9, after "combining", it should say "at its inputs".

In line 7, of claim 9, "inputting" should be replaced by "passed through".

In line 7, of claim 9, "from" should be replaced by "from the output of".

In line 9 of claim 9, after "combining", it should say "at its inputs".

In line 10, of claim 9, "inputting" should be replaced by "output".

In line 11, of claim 9, "inputting" should be replaced by "passed through".

In line 14, of claim 9, "switch" should be replaced by "when in the switch state".

In lines 7 and 12 of claim 10, "a channels" should be "channels".

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In line 14 of claim 10, "demultiplexer" should be "multiplexer".

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi (6222653).

In figure 11, Asahi teaches a wavelength splitter (304) which splits the channels into a first signal (λ_1 - λ_n) and a second signal (λ_{n+1} - λ_{n+n}), add/drop section (317) and switching section (316). In one state, the combined first and second signals are combined and put on the first fiber. In the second state, the second signals are switched to the second fiber. He says that λ_1 - λ_n are the service wavelengths and λ_{n+1} - λ_{n+n} are the protection wavelengths. Although when he switches the protection channels to the second fiber, he switches the service channels also, this reads on the claim because he does switch the protection signal to the second fiber. In regard to the control means, see claim 85 of Asahi.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi (6222653) as applied to claim 1 above, and further in view of CN1279548A.

In regard to claim 5, although Asahi (6222653) do not teach specifics about their ADM's, CN1279548A, of record disclosed an add/drop section for use in the optical ring network. More specifically, it disclosed the following technical features (as seen from Paragraph 3, Page 6 to Paragraph 2, Page 11 of 'the Specification and Figures 2 ')

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and 5 in Reference 2): the add/drop section comprises a demultiplexer for performing wavelength division demultiplexing optical signals and for outputting a plurality of channels from the demultiplexed optical signals; an optical receiver for performing a photoelectric conversion with respect to channels dropped from the demultiplexer and for outputting the converted channels; an optical transmitter for outputting channels to added; a multiplexer for performing wavelength division multiplexing channels inputted from the demultiplexer and from the first optical transmitter and for outputting the multiplexed channels. Moreover, the functions of the above technical features in CN1279548A are the same as those in the present invention, that is, are all for providing the function for adding/dropping a signal in the node of the optical network. Therefore, it gave a teaching for applying the above technical features disclosed by CN1279548A into the disclosed inventions of Asahi (6222653) in order to the technical problem.

Further, in regard to claim 5; the combination of CN1279548A and either Asahi (6222653) do not specifically teach a first tap coupler, provided on a path between the first demultiplexer and the first optical receiver, for splitting a part of the channel inputted into the first optical receiver and for outputting the split channel to the controlling section, and a second tap coupler, provided on a path between the first optical transmitter and the first demultiplexer, for splitting a part of the channel outputted from the first optical transmitter and for outputting the split channel to the controlling section, as defined in Claim 5. It is commonly known in the art for the control section to recognize and respond the link failure by monitoring the signal

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input to the optical receiver and output from the optical transmitter. As such, it is obvious for those skilled in the art to obtain the technical solution of Claim 5 by combining CN1279548A with the above common technical means on basis of Asahi (6222653). With regard to claims 6-8, CN1279548 teaches that it is well known to use AWGs and photo detectors or their equivalent (which would obviously be a photodiode. With regard to the laser diode, it is well known to use laser diodes as transmitters in order to provide a high power signal.

7. It would appear that if the applicant clearly claimed that when there is a link failure, that *only* the protection channel is switched to the second link (i.e. that the working channels are not also switched to the second link) that claim 1 would be allowed. Further, claims 9-14 are objected to in view of 112 problems. If these problems were corrected and all the limitations of the independent and all intervening claims were included, the claims would be allowable. These changes would not require further search and consideration.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Leslie Pascal
Primary Examiner
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